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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/762,816	01/22/2004	William J. Shaw	10527-455001	6207
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EXAMINER STEWART, ALVIN J				
ART UNIT		PAPER NUMBER		
3774				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/762,816

Applicant(s)

SHAW, WILLIAM J.

Examiner

Alvin J. Stewart

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 November 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-25, 27-40, 46 and 51 is/are pending in the application.
- 4a) Of the above claim(s) 2, 4, 5, 12, 13, 17, 32, 34, 46 and 51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3, 7-11, 14-16, 18-25, 27-31, 33 and 35-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Claims 2, 4, 5, 12, 13, 17, 32, 34, 46 and 51 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 11/13/07.

The examiner has withdrawn claim 51 because it depends on a withdrawn claim.

The requirement is still deemed proper and is therefore made FINAL.

Response to Arguments

Applicant's arguments filed 11/13/07 and 11/06/06 have been fully considered but they are not persuasive.

The Applicant's representative discloses that nowhere in the Canham et al reference proposes the use of silicon in a stent and that the Canham et al reference discloses other applications which do not necessarily involve semiconductive fabrics. However, the Examiner completely disagrees with the Applicant's point of view. Paragraph 90 clearly discloses that the silicon or silicon containing fabric can be use in stents and the silicon material used in those stents are described above that paragraph. Including the silicon material disclosed in paragraphs 10, 13, 39, 42, etc...

Additionally, the Examiner wants to point out that silicon or silicon composites are particularly useful in medical applications as mentioned in paragraph 85. Therefore, the fibers mentioned in paragraphs 10 and 11 are use in stents.

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Regarding claims 2 and 51, the Examiner did not answer the Applicant's representative arguments because those claim belong to a non-elected species. However, paragraph 10 discloses that boron can be use in combination with silicon.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1, 3, 7-11, 14-16, 18-20, 23-25, 27-31, 33, and 35-40 are rejected under 35 U.S.C. 102(e) as being anticipated by Canham et al. (USPAP 2005/0048859).

Canham et al. disclose a medical device with all the elements of claim 1. See [0010] and [0042] for the device including a structure that comprises a first ceramic fiber comprising a first metalloid (silicon). See [0013], [0039] and [0129] for each dimension of the first ceramic fiber being greater than one micron. See [0090] for the device being in the form of stent.

Claim 3, see [0010] and [0042] for the first metalloid being silicon and the first ceramic fiber further comprising a second metalloid, boron.

Claims 7 and 8, see [0033] for the first ceramic fiber being at least 5 microns long.

Claims 9 and 10, see [0033], [0034], [0039] and [0129] for the first ceramic fiber being at least five microns wide.

Claim 11, see [0054], [0061], [0062] and [0090] for the first ceramic fiber extending continuously along (knitted) and helically about (braided) the device.

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Claims 14 and 15, see [0090] for the structure being tubular stent.

Claim 16, see [0010] and [0042] for a polymer carried by the structure.

Claim 18, see [0090] for a therapeutic agent.

Canham et al. disclose a medical device with all the elements of claim 19. See [0010], [0029], [0042], [0054], [0085], [0138] and [0139] for the device including a structure that comprises a ceramic fiber intertwined with a non-ceramic fiber (silk). See [0090] for the device being in the form of stent.

Claim 20, see [0013], [0039] and [0129] for each dimension of the ceramic fiber being greater than one micron.

Claims 23 and 24, see [0054], [0085], [0138] and [0139] for the ceramic fiber being knitted or woven with the non-ceramic fiber.

Claim 25, see [0090] for a therapeutic agent.

Canham et al. disclose a medical device with all the elements of claim 27. See [0010], [0042], [0085], [0138] and [0139] for the device including a structure that comprises a mixture of polymer (silk) and ceramic fibers comprising a metalloid (silicon). See [0013], [0039] and [0129] for each dimension of the fibers being greater than one micron.

Claims 28 and 29, see [0033] for the first ceramic fiber being at least 5 microns long.

Canham et al. disclose a medical device with all the elements of claim 30. See [0042] for the device including a structure that comprises a polymer first layer (polymer fiber) and a second layer (coating) comprising a ceramic fiber comprising a metalloid (silicon).

Claim 31, see [0090] for a therapeutic agent.

Canham et al. disclose a medical device with all the elements of claim 33. See [0090] for the device comprising a tubular structure in the form of a stent. See [0010] and [0042] for a polymer element on the tubular structure, wherein the polymer element comprises a ceramic fiber comprising a metalloid (silicon). See [0013], [0039] and [0129] for each dimension of the ceramic fiber being greater than one micron.

Claims 35 and 36, see [0033] and [0064] for the required ceramic fiber length.

Claims 37 and 38, see [0122] for the ceramic fiber being about 10 microns wide.

Claims 39 and 40, see [0013] for the ceramic fiber having an aspect ratio within the required range.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canham et al US Patent Pub. 2005/0048859 A1.

Canham et al discloses the invention substantially as claimed. Additionally, Canham et al discloses a silicon material capable of combined with ceramic or metal phases. However, Canham et al does not disclose a metal made of stainless steel or Nitinol.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the metal used in combination with the silicon with the stainless steel or nitinol, since it has been held to be within the general skill of a worker in the art to select

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an equivalent known element on the basis of its suitability for the intended use as a matter of obvious design choice.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alvin J. Stewart whose telephone number is 571-272-4760. The examiner can normally be reached Monday through Thursday and every other Friday from 9:00am to 6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Corrine McDermott can be reached at 571-272-4754. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**ALVIN J. STEWART
PRIMARY EXAMINER**

Alvin Stewart